DOCUMENT RESUME

ED 109 181 TM 004 629

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TITLE The Development of Instrumentation to Measure the Alternative Operational Manifestations of Five Basic Functions of Schooling.
PUB DATE [Apr 75]
NOTE 37p.; Paper presented at the Annual Meeting of the American Educational Research Association (Washington, D. C., March 30-April 3, 1975)

EDRS PRICE MF-$0.76 HC-$1.95 PLUS POSTAGE
DESCRIPTORS *Alternative Schools; Classrooms; Discipline; Instruction; *Measurement Techniques; *Organizational Effectiveness; School Environment; *School Role; Schools; Socialization; Student Certification; Test Construction
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ABSTRACT

This paper describes research in progress to define and measure the operational manifestations of five sociological functions of schooling proposed by William Spady: selection, custody/control, instruction, socialization, and evaluation/certification. The paper briefly presents the theoretical framework, describes the elaboration of this theory into items which tap operational characteristics of schools and classrooms, presents the results of two sets of trials of the instrument, and describes research issues which can be addressed through use of the instrument. (Author)

The Development of Instrumentation to Measure the Alternative Operational Manifestations of Five Basic Functions of Schooling

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Paper prepared for delivery at the American Educational Research Association Annual Meeting, March 30 - April 3, 1975, Washington, D.C.

INTRODUCTION

The origins of this research lie in the acceptance for some years by the authors of a conclusion suggested by a mounting body of evidence: the formal instructional program of schools accounts for only a small portion of the effects schools have on students. Various non-instructional aspects of the way the school is organized and run, and the values, norms, and behaviors reinforced by these procedures and structures, have far greater effects.[1]

Early Efforts at School Change

This conclusion was suggested by our own reading of the last fifteen years of attempts to change and improve schools. The late fifties and most of the sixties saw massive curriculum development efforts conducted outside of the schools, the products from which were to be purchased and installed by local districts. While these were adopted in many districts, there was widespread dissatisfaction with the results. While to a certain degree this dissatisfaction resulted from a change in the critical problems facing schooling, nevertheless, the inadequacies became apparent: developing materials to fit the already existing structure severely limited the range of possible effects.[2]

The same conclusion is suggested by the experience of government efforts to stimulate change and improvement in schooling through the direct funding of local change efforts. Title I and Title III resulted in many new programs, but they tended to be "add-ons," lasting only as long as there was extra funding, and rarely affecting the basic structure of schooling.

The frustration resulting from their limited impact even on the target students, suggests again the limits of changes which do not change the structure and processes of schooling.[3]

What, then, of efforts to directly change the structure of schooling? Several foundations in conjunction with school professionals did initiate such efforts, but after many years of effort at flexible scheduling, team teaching, and similar innovations, the foundations grew frustrated by the lack of impact and are looking for other approaches. Efforts to change the structure of schooling, such as they have been, are more difficult to bring off, and still seem to have limited value.[4]

More Recent Efforts

This history suggested the need for two things if schools were to change significantly: more massive interventions, involving changing the people in the situation, and more powerful models of schooling made up of new processes and structures that would have more significant effects. In the past few years two lines of effort in these directions have become more prominent. One, the widespread effort to initiate alternative schools, began more or less with the belief that the only possible approach to changing schools in significant ways is to start over. These efforts have for the most part been short-lived. Performance Contracting met limited success. Vouchers may never get a genuine test. Independent alternative schools have tended to die quickly, and alternatives within the system have, at least until recently, survived with difficulty.[5] There is some

evidence now, however, that the notion of alternatives is becoming accepted. With this, the difficulties of conceptualizing and then creating and maintaining a genuinely alternative model of education have become more apparent. Individuals involved in the initial creation of alternative schools tended to have counter-dependent ideologies: Whatever existing schools do, if we do the opposite, all will be fine. While the most naive abuses of the alternative school ideology have largely died, providing a variety of alternatives for student choice which involve different structures and processes has been difficult, and we have barely begun to resolve the problems of matching a student with an appropriate learning context.[6]

In a parallel movement much more effort is now being focused on building capability for change at the local level[7] and providing long term technical assistance and training for such efforts.[8] These efforts to work from within have also had their limitations. Not only have organizational development and other local problem-solving efforts been very expensive, but even when an outside group provided substantial technical assistance, the focus has been on having the people in the situation engage in a problem solving process, which usually has such steps as trying to improve their communication, define their goals, define problems in reaching those goals, lay plans for overcoming the problems, implement the plans, and evaluate the results.[9]

While the move toward participatory decision-making in organizations is laudatory in many ways, if one accepts our premise that the basic needs are to change the structure of schooling, to uncover the "hidden curriculum," to gain perspective on what now is, to conceive of new patterns of schooling (at least for some students), then working with whatever is generated by the

people in the situation is likely to reinforce the status quo. Ironically, at the same time that people are recognizing that more massive effort is needed to change existing schools, they tend to be caught in a "process" approach to change that almost guarantees a lack of sufficient perspective to bring off the needed changes.

To summarize, although widespread agreement seems to be developing that for large numbers of students, attempts to improve significantly their school experience must involve changing the structure and processes of schooling, there needs to be the development of alternative models of schooling described in terms of their structures and processes, not (as so often is the case in alternative schools) in terms of what would not be done. There also needs to be school change processes that enable participants to get outside their situation, to become aware of some of the hidden values and assumptions in the way their school is run, and to conceive, consider, and implement different forms of schooling.

Our Approach: Describe Existing Alternative Models of Schooling

We were persuaded by the case study literature that there were and are successful examples of genuinely different models of schooling.[10] Some have been created new, outside existing schools. Others have been created and sustained within existing schools. However, little careful analytic work has been done to isolate and describe the critical features of these in a way that others could attempt their replication. Again, consistent with our earlier conclusion, we believe these critical features to be the

structure and processes by which the school was organized and run.

Our move from this was relatively simple. If we could develop an instrument for describing the critical structures and processes of the alternative models of schooling that do exist, we would have the key information to put in the hands of individuals trying to change and improve their own schools. Ways could be developed to integrate into school change processes a consideration of these different models of schooling; and having available descriptions of their structures and processes would not only give individuals the capacity to make intelligent choices, it would give them perspective on aspects of the operation of their own schools that they probably never questioned.

Furthermore, any instrument for describing the critical structures and processes of alternative schools would probably work as well on one's own. This would allow the description of an existing school along exactly the same dimensions as any alternative considered for implementation, and indicate much more clearly than any and of the techniques presently in use what aspects of an existing school would need to be changed in what way to implement any new model.

In sum, we set out to develop an instrument with these characteristics:

1. Breadth of Content: the instrument must be sensitive to the critical features not only of ordinary schools but also of unique and unusual schools.

2. Breadth of Interpretation: the instrument must describe the critical features of schooling, and explain the importance of aspects of the operation of schools which people often regard as of no consequence.

3. Concreteness of Description: the instrument should describe the critical features of schooling in a way that others could replicate them.

4. Utility/Causality: the instrument should focus on features of schooling that can be manipulated or changed, if possible with predictable consequences.

5. Ease of Use and Interpretation: the instrument must be able to be used and interpreted by local people, within their budget and time constraints, if it is to be useful to a wide variety of schools, and if it is to be able to provide the needed perspective for their change efforts.

6. Focus on Students: the instrument should focus on the ways schools affect students, not adults, as this is the basis on which school changes legally ought to be made.

THEORETICAL FRAMEWORK

The above analysis identified only a set of needs. The initial research question was, what are the critical features of schooling, the important structures and processes which need to be described, the dimensions along which all schools could be compared. We sought a set of powerful concepts for interpreting what happens in schools, which we could then use to develop an instrument to describe to the larger society the structures and processes which are responsible for these happenings. Sociologists have for years examined the function education plays in society, and the functions performed by schools in relationship to modern society.[11] Spady has integrated and synthesized these discussions (Spady, 1973; 1974a; 1974b) and specified five functions that schools carry out for the larger society. All schools carry them out in some fashion, conscious or not.

Custody/Control

In modern society children between certain ages are required by law to attend schools for a certain number of hours per day. School staffs have legal authority over students while attending school. The effect of this is to grant to schools (within certain limits) legal custody of the child for those hours. The school must at a minimum be able to insure the safety of the children and the orderly pursuit of activities. In addition there is usually the expectation that schools will do more than just provide custody; they will see to it that students are exposed to instruction. The combination of the non-voluntary nature of schooling and the "more than custodial" expectations for schooling create the need for a complex set of internal

mechanisms and procedures for a school to successfully perform custody/control. The school manifestations of this are the system of rules, and the rule making and enforcing mechanisms, both formal and informal, which govern student conduct.

Selection

In any society there are selection mechanisms by which individuals are distributed among (allocated to) various occupations and roles. In modern society schools are a major component of this selection mechanism, for the degree of access that students have to jobs and future educational experiences after finishing school is influenced by what has happened during their school careers. This is particularly true regarding the grades and credentials students receive, the programs they have followed, and the skills they have mastered.

Internal to the school there are also mechanisms and procedures by which different students have different degrees of access to programs, courses, teachers, and facilities. These distribute students across the various activities so that schooling affects different students in different ways. This internal selection process is generally the initial force in assuring that schooling has external selection consequences. The school manifestations of the selection function are the criteria, frameworks, mechanisms and procedures by which internal selection is accomplished.

Evaluation/Certification

In any society there are mechanisms by which the quality of a person's contribution to the things the society values is determined and recorded.

Schools formalize a major component of this achievement process for modern societies. While there may be disagreement about the relevance of the standards set by schools, or the validity of their application, standards for students are set, these are applied to the work of the students, and judgments of the degree of attainment are communicated to the student and to the outside society. The school manifestations of evaluation/certification are the criteria, framework, mechanisms and procedures by which this is done.

Instruction

Every society has procedures for instructing its children. In modern society these procedures have been formalized and institutionalized in schools; they are expected to provide a major component of the instruction conducted by the society. Schools are expected to systematically attempt to increase the information base, and to improve the cognitive, physical, and in some cases the affective skills of students. What we typically know as the curriculum of the school are those specific sequences of materials and experiences to which students are exposed in order to facilitate the acquisition of these skills. The manner in which this exposure takes place and is reinforced is a result of the instructional process or pedagogy used by the teacher. Measuring the instructional function of the school, then, requires a measuring of the content, sequencing, and nature of students' formal learning experiences; and the settings, mechanisms, and procedures which define those experiences.

Socialization

Every society has processes for socializing its children, for developing in them the attitudes, beliefs, expectations, and values for successfully performing roles in specified social systems. In modern society schools

accomplish a major component of the society's socialization, whether as a consequence of other activities in the school, or as a result of conscious effort. To analyze the school's role in performing its responsibility to prepare youngsters for life in a complex secular society is to acknowledge not only the relatively limited range of information and skills that is typically included in the formal curriculum, but also the centrality of the teacher as an agent of both society and the school in shaping the elaborate belief, expectation and behavior codes that characterize "normal" or "appropriate" behavior. Note that the socialization function of the school seems to attach social meaning, significance, and utility to the capacities developed by the instruction, but conflicts often arise regarding the disjunction between outcomes and capacities that facilitate one's accommodation to the role of student, and those that enhance one's effectiveness in roles outside the school. In other words, things that make youngsters acceptable as students will not necessarily make them successful or happy as adults. The school manifestations of the socialization function are the mechanisms and procedures by which schools shape the beliefs, expectations, and behavior codes that they do shape, some of which may have more utility within the school than outside.

As the above descriptions make clear, the five functions defined by Spady are general functions which every society must perform, a major component of which has fallen to schools in modern societies. How well the school accomplishes the functions, both in terms of the nature of the outcomes and the degree of success, is the key factor in determining whether and how schools ought to be

changed. We are well aware of the more radical critique of schooling which argues that the mismatch between societal expectations and school performance is massive: for example, it is contended that schools spend all of their time on custody/control; the selection mechanisms work to keep the poor and the racial minorities in their place; the competitive standards are severely damaging to self-concept; the content of the instruction is rote and trivial; students are socialized to be passive, dull and obedient.[12] However, no one has analytically described the extent to which these accusations are true, nor has there been adequate descriptions of alternative forms of schooling which could successfully overcome these shortcomings. Such is the intent of the instrument under development.

METHODOLOGY

We determined it would be too difficult, time-consuming, and expensive to measure the nature and quality of a school's performance of these five functions in terms of their consequence for graduates of a school. In time longitudinal studies may become routine, and if so, indices of the quality of performance of these functions would seem intuitively relatively easy to develop. However, for the present what we could do was to map the nature of the structures and processes which accomplish each function, and describe them as they operate in schools. We term these functional subsystems. If we could do the mapping at a level of detail sufficient to identify the elements of the subsystem which could be altered if one wanted to alter the way it operated, this detail would also be sufficient to allow people to make judgments about whether they would like to see it work differently.

The type of methodology was a problem. Most of the instrumentation used in previous studies of schools, powerful though they were, were inappropriate. They did not meet one or another of our criteria.. Case studies, particularly the ones of alternative schools that influenced us initially, tended to be based on anthropological methods--interviewing, participant observation, use of informants--or they tended to be written as a personal journal or report. While we found many of the testimonials and descriptions intuitively convincing, we could not foresee these techniques being used adequately by those untrained in the specialty. And, they would be too expensive, and the turn-around time would be too long for them to be useful in local change efforts.

Several of the more systematic studies of schooling in the literature did use carefully developed instrumentation, but they tended to be limited to investigation of one particular aspect of schooling (i.e., they would not meet our breadth criterion), or they involved observation and interviewing, techniques too expensive and difficult to use, or they focused on an individual student's experiences and perceptions of schooling, rather than inquiring into how things are generally done by the school.

The measures which most closely approximated the criteria were the various organizational climate, and classroom climate or learning environment instruments. The basic methodology is to use a questionnaire consisting of statements about an organization, to which respondents indicate "true/false" or "agree/disagree" (sometimes with two point scales; sometimes with three or four). The respondents are those who work in the organization. When applied to schools, the respondents include the students.

The methodology has been used extensively to study the environment of various organizations (Moos and Houts, 1968; Stern, 1970; Moos, 1972; Gerst and Moos, 1972). In an otherwise critical essay on the substance of the concept "climate", Guion is careful to point out that the methodology is not the problem:

> Perceptions of organizational climate can be used as estimates of attributes of organizations...The items to be treated as genuinely descriptive are those in which the frequency of endorsement is not significantly different from 100% or 0%. (Guion, 1973, P. 124)

The relative ease-of-use of this methodology (questionnaires could be filled

out by everyone in a school in an hour or so); the possibility of statistical treatments that would be useful to local people (we could provide canned programs, graphical printouts for comparative purposes), and the content-flexibility of the method (we could easily plug in questions on the structure and processes of the organization that accomplish each function), led us to select this as our approach to describing schools.

Existing instruments to measure school climate, however, had other problems in satisfying our needs, even if the items could be interpreted as describing characteristics of the organization. The Organizational Climate Description Questionnaire (OCDQ) of Halpin and Croft (1963) measures teacher and administrator characteristics, not the mechanisms and procedures by which schools affect students. Stern's High School Characteristics Index is based on student perceptions of their school, but its length (thirty scales, ten items per scale) and reliability are problematic (Rizzo, 1970; Jones, 1968). Its theoretical basis is also of limited utility for our purposes. Stern began with personality dimensions, and looked for aspects of the environment which could constitute the "Press" to match personality "Needs." The scale definitions (Stern, 1970, Appendix A) describe an organization in terms of the personality characteristics of the people in the organization, not (as we wanted) a description of the structure and procedures of schools which affect students.

There is a long history of efforts to assess aspects of the "classroom climate." While these are relevant to only a portion of an entire school, it seemed initially that they could serve our purposes for the classroom portion

of the instrument. Closer inspection, however, proved otherwise. In general these efforts have been targeted on the elementary school classrooms, not the high school; they have concentrated on coding teacher verbal behavior; and the methodologies have been observational. There have been several efforts to develop questionnaires of the type we selected, for use in high school classroom measurement (Walberg, 1968; Anderson and Walberg, 1968; Anderson, 1970; Steele, House, and Kerins, 1971; Trickett and Moos, 1973). The Trickett and Moos instrument has some items (one set of variables) labeled the "Constitution of the Classroom and Teaching Innovations," but the items are not tightly related to any general taxonomy of types of classroom structures and processes. The Anderson and Walberg work, while powerful in many ways, makes use of what they label high inference items. While they selected these because of their higher likelihood of predicting learning outcomes, they are of limited value if the intent is to make changes in what is happening in the classroom. They end up measuring general affect in the classroom, rather than the processes responsible for that affect.

The instrument which most nearly approximates our needs is the Steele, House, and Kerins "Class Activities Questionnaire (CAQ)," developed to evaluate programs for the gifted in the state of Illinois. They specifically use low-inference judgments of "prevailing patterns of instructional emphasis" with at least the possibility that the data, in addition to being valuable as an evaluation, could be used to manipulate the environmental demands to produce optimal learning. The difficulties with the instrument are its shortness (it was focused on a particular set of innovations, not a broad

view of classroom activities), and its assumption that the class is operating as a group. They had difficulty using the instrument in an independent study class. To the degree that we need an instrument that is capable of use over time in circumstances where instruction will move toward such alternative structures as independent study, their instrument is too limited. It represents a good model of what can be done, and their efforts at validation are particularly admirable.

Even at its best a methodology which asks those involved in a situation to describe its characteristics is not without its limitations. In a recent thorough review of the literature on organizational climate, James and Jones, (1974) cited several limitations of relying on perceptual measurement:

> Purely perceptual measurement does not permit differentiation between diverse but important different situations: inconsistent or capricious behavior; behavior adapted to individual needs; differences caused by different opportunities to observe; differences caused by individual characteristics; and instrument error. (P. 1104)

We recognize these limitations. Some are essentially validation problems. If, for example, an item behaves strangely, it may be possible to design ways to find out why, and either eliminate the item, or interpret it accordingly. Some of the limitations appear to us inherent, and merely reflect the need for additional measures if there is a need to separate out some of the ambiguity. The advantages of the instrument seemed to us substantial enough to proceed with its development.

We then faced the task of generating items in this format to fit the theoretical framework.

THE NATURE OF THE INSTRUMENT

The instrument, presently in its second draft, consists of 406 discrete items requiring at least one response. Because some of the items allow multiple responses and some items are related (one being answered only if the previous one was answered in a particular way) the maximum number of responses from any one respondent is 478.

In theory, some aspects of the way a school performs each function are carried out at the classroom level. That is, the teachers in classrooms have certain custody/control, instruction and evaluation/certification responsibilities that they perform in some way; the teachers use some selection mechanisms for acquiring students for their class and allocating them among whatever range of instructional activities they provide, and there are almost certainly socialization consequences to the way in which the class is run.

Similarly, in theory some aspects of the way a school performs each function are carried out at levels other than the classroom (for example, by administrators, by counselors, by the department). This instrument uses only two levels: the classroom and the school. Respondents are asked either to describe how something is done in their classroom or in the school. Analytically, all aspects of the performance of each function that are not carried out in the classroom are considered to be carried out by "the school." There are 194 items related to the school level which, because of the provisions for multiple responses to some items, could reach a maximum of 245. There are 212 items associated with the classroom level which again, due to the provisions for multiple responses, could reach 233 responses. We expect that the next

revision of the instrument will reduce this number somewhat.

Because of the number of responses and the desire to produce an instrument that can be answered by a student within a single class period, the items have been split into two parallel forms of the instrument. This is strictly a mechanical procedure. A random half of the students in a normal classroom is more than ample to provide accurate information about that classroom and therefore, splitting the instrument in half saves time.[13] There is no intent to compare Form A and Form B of the instrument. Items from both forms are combined in the analysis.

In this type of instrument, the response set is for the subject to describe how things happen in the organization (in this case, in his classroom or in his school). It is not an opinion survey or an attitude instrument. Respondents are cautioned to describe how things <u>are</u> for most students, not how they personally would like them to be. The responses, of course, are some mixture of the two. One's opinions and attitudes do color the way one sees the world; and if items probe types of experiences which the subjects have not directly witnessed or experienced, they will be responding in terms of their projection of what they would expect would happen.

Since the aspects of each function that are carried out at the classroom level can be carried out in a variety of ways, any one classroom will represent a certain pattern of carrying out those aspects of the five functions. While this may vary somewhat from day to day or week to week, the questionnaire is intended to tap the consistent pattern of each classroom. It is expected that within one school, the classrooms will exhibit a wide range of different patterns.

Since the aspects of each function that are carried out at "the school" level can also be carried out in a variety of ways, any one school will represent a certain pattern of carrying out those aspects of the five functions. While this may vary somewhat from day to day or week to week, the questionnaire is intended to tap the consistent pattern of each school. It is expected that schools will differ both in terms of the pattern exhibited in carrying out the functions and in terms of which aspects of each function are carried out at the classroom level and which at the school level.

The Items

In developing the instrument, literature was reviewed to identify all the key aspects of valid conceptions of how each function can be accomplished, and discrete aspects of a school's operation which were related to these conceptions were identified. The items of the instrument list alternative operational forms that each aspect of how a school accomplishes each function might take, and respondents indicate which form is present in their school or classroom.

Custody/Control

Custody/Control, as a function of schooling, consists of the system of rules, both formal and informal, and the rule making and enforcing mechanisms which govern student conduct. Measuring Custody/Control for a school involves measuring the key attributes of the system of rules, and the rule making and rule enforcing mechanisms.

Nine key aspects are measured by sets of items in the instrument:

1. The extent of the rules; the range of the types of behavior which are being controlled -- Some school or teachers attempt to regulate everything. Others have only a few critical rules.

2. The nature, severity and duration of the usual punishment for breaking a rule	Some schools or teachers are -- much more lenient than others for the same offense
3. The equity of enforcement of the rules	Some schools or teachers -- play favorites or are influenced by various irrelevant factors to deal more less harshly with some students. In other schools only a few circumstances can legitimately temper a punishment
4. Knowledge and clarity of the rules	Some schools or teachers have -- rules which are specific about what can or cannot be done. In others the rules are deliberately vague to allow more discretion to those enforcing the rules.
5. Clarity of what constitutes punishable behavior (regardless of the formal rules)	Some schools or teachers make -- very clear what consitutes acceptable or unacceptable behavior, regardless of the formal rules. In others the expectations about acceptable behavior are much more vague.
6. The nature of the due process (hearing process, appeal process) connected with the rules	Some schools or teachers are -- much more likely to have student rights safeguarded by having a hearing process or an appeal process built in to the enforcemen of rules than others.
7. The possibilities of influencing the rules	Some schools or teachers involve -- students in drawing up the rules and have the basis of a social contract; others impose rules to varying degrees.
8. The locus of enforcement of the rules	Some schools or teachers may -- rely very heavily on enforcement of rules at the school level (principal, vice-principal); others expect virtually all rule enforcement to take place at the classroom level (by the teacher).

9. General climate -- Some schools or teachers create a climate of openness and flexibility toward the rules; others create a climate of rigidness and threat.

Selection

Selection, as a function of schooling, consists of the mechanisms and procedures by which a school places students into different programs, courses, facilities, or with different teachers, which gives them different school experiences.

Measuring selection for a school involves measuring the key aspects of the system of mechanisms and procedures that separates out students and places them into different school experiences. The instrument is limited to covering only selection into formal classes or courses of the school.

Five key aspects are measured by sets of items in the instrument:

1. The various routes by which a student ends up in a particular course -- Some schools simply assign students. Others allow varying degrees of student choice or influence.

2. The consequences of not being selected into a desired/needed course -- Some courses are available every quarter, term or semester, so the cost in terms of school time is small. Others are available only once a year, or less, and if missed once the consequences of loss of time are substantial.

3. The ways in which different authorities in the school affect the selection of a course -- In different schools the decision as to which course a student will take is made by different levels of personnel, with varying types of influence by others.

4. The characteristics of students that affect selection -- In different schools, different characteristics of students affect whether a student gets into a course.

5. The ease of changing courses -- In some schools a student can change courses whenever he/she wants to change; in others it is very difficult to change, regardless of the legitimacy of the reason for wanting to.

Evaluation/Certification

Schools set standards for students to meet, apply these standards to the work of students to determine the degree to which they have been met, and communicate this judgment to the student and to others even though they may not do this by any conscious or rational procedure. Though evaluation-certification has some schoolwide aspects--often, for example, the permanent record is standard for the whole school--the bulk of the evaluation-certification function is found within classrooms, and may vary considerably from classroom to classroom. Measuring evaluation/certification for a school involves measuring at the classroom level the key aspects of the system by which: standards are set, standards are applied to the work of a student in a course resulting in judgments of the degree of meeting the standards, and these judgments are communicated to the student and to the outside world.

Four key aspects are measured by sets of items in the instrument:

1. The mechanisms and procedures by which standards are set, and the characteristics of the resulting standards
    1. Who determines the work to be done to meet a particular standard and how is this done
    2. What type of standards are used
    3. When are standards developed/announced
    4. Who determines the standards

2. The mechanisms and procedures by which standards are applied to the work of a student, resulting in judgments; and the characteristics of this application and these judgments

    5. How flexible is the evaluation system

    6. What is the time frame of the tasks/of the evaluations

    7. When (during the course) are evaluations made

    8. To what degree does everything get evaluated

    9. How important to the course is the evaluation of work

    10. What use is made of the evaluation information

    11. Who does the evaluating

    12. How consistently are the standards applied

    13. Who determines the final evaluation and how

3. The mechanisms and procedures by which judgments are communicated to the student and the characteristics of this communication

    14. What is the frequency of feedback

    15. How are the evaluations communicated

    16. How helpful are the evaluations

4. The mechanisms and procedures by which judgments of the quality of a student's work are communicated to the outside world and the characteristics of this communication

    17. What information is used in determining a final evaluation

    18. What is recorded on the permanent record

Instruction

Instruction as a function of schooling consists of the mechanisms and procedures by which schools make a systematic attempt to increase the information base and to improve the cognitive, physical and in some cases affective skills of students. Since these attempts are nearly always made within classrooms or

at the "classroom level" of a school (i.e. under the direction of a teacher, not an administrator) the questions probing this function are focused on the classroom level. Measuring the instruction function for a school involves measuring the key aspects of the system of formal mechanisms and procedures cited above.

Six key aspects of these mechanisms and procedures are addressed by sets of items in the instrument:

1. The nature of the teacher's behavior toward students	-- Certain characteristic teacher behaviors facilitate learning, others do not.
2. The teacher's response to various types of student behavior	-- To each of a wide variety of possible student learning behaviors, teachers can respond across a complete range, from requiring that behavior to prohibiting it.
3. The characteristics of the learning experiences	-- Different learning experiences can differ widely in cognitive characteristics and affective characteristics.
4. The degree of student influence on and choice of learning goals and learning methods	-- Some courses allow wide choice among many options of goals and methods, others are much more focused and prescriptive.
5. The characteristics of the materials and facilities	-- Some courses provide a large variety of different materials and spaces, others are more limited and sterile.
6. The structural characteristics of learning settings	-- Some courses are predominately conducted in one type of setting. Others have students in a variety of settings and arrangements.

Socialization

Socialization processes develop in persons those attitudes, beliefs, expectations, values and affective capacities for successfully performing roles in specified social systems. Measuring the socialization function of a school involves measuring the key aspects of the system of mechanisms and processes schools have for developing the requisite attitudes, beliefs, expectations, values and affective capacities in students.

These mechanisms and processes are extremely complex and subtle, and the boundary between the school's performance of the function and the surrounding community's performance is blurred. One socialization effort is unique to a school, however. This involves trying to get students to successfully perform the role, "student." While in various schools there may be different degrees of overlap between what is needed to be a "student" and what is needed to be a successful adult outside, measuring this discrepancy is beyond the scope of the instrument. The instrument measures the key aspects of the school's mechanisms and processes for socializing students to conform to its view of how students ought to bahave, qua students.

Bidwell, (1971) distinguishes three mechanisms of socialization: direct personal influence (dyadic); reference group influence; and activity structures. For the first two the underlying learning model is a reinforcement model: sanctions or fear of sanctions. While formal sanctions (lowering grades, suspension) have socialization consequences, the instrument deals with those under the category Custody/Control. The Socialization section of the instrument focuses on what Bidwell terms "solidarity sanctions:" liking, friendship, acceptance and the real

or imagined threat of loss of these through not conforming to expectations. Activity structures are "characteristic structures of activities" that exemplify certain values, expectations or other desired socialization outcomes. These are, for the most part, not conscious decisions, but unexamined effects of the way schooling is structured: i.e., "the hidden curriculum."

These items in the instrument yield a description for any school of the school's image of an ideal student (the socialization goal) and for those elements which are part of the image, whether the socialization mechanism is some form of conscious social control by the staff or the student's peer group, or whether it is an unconscious result of the way the school's activities are structured.

Bidwell distinguishes between knowing the content of a value, expectation, or belief versus having commitment to it. The latter is the principal evidence of socialization. To tap this element the items in the socialization section are related to the other four functions. Students have described how each of the other four functions operate in the school. These descriptions constitute a picture of how the school is run. By focusing on these same characteristics in the socialization section, it is possible to determine how the school tries to get students to accept and be committed to how the school is run. For example, the student may have described the school's custody/control system as one which is highly inequitable--some students can escape punishment for things that others are punished for. In the socialization section the student would be asked whether a value such as "All students should receive the same punishment for the same offense" is stressed in the school or not; and if so, whether it is openly discussed or merely an unexamined value. This will indicate the degree of acceptance of the value, as well as the fit between the stressed values and the

behavior.

The items of the socialization section, then, are similar to this and are in four categories:

1. Socialization related to Custody/Control
2. Socialization related to Selection
3. Socialization related to Evaluation/Certification
4. Socialization related to Instruction

Examples of Questions

The question in the Custody/Control category which taps the nature, severity and duration of the usual punishment for breaking a rule, for example, lists a large number of actions which range from those that all schools have some kind of rules prohibiting (e.g., stealing) to those that only the more restrictive schools prohibit (e.g., boys having long hair). These actions also cover various aspects of a student's life in school, from dress to attendance to missing academic deadlines for work. To each of the listed actions, respondents are asked to indicate whether or not a rule against it exists and if so, what the nature of the punishment is for violation. Six punishment options are provided, ranging from none, through a restriction of some sort (e.g., declared ineligible for athletics) to lowered grades, suspension, or expulsion. Schools will differ, we predict, with respect to what they have rules about, and on the severity of punishment meted out for violation of similar rules.

The question in the Selection category which taps the characteristics of students that affect selection, for example, lists a large number of student characteristics (e.g., is young, is a leading athlete or cheerleader, has wealthy parents). Respondents are asked to indicate whether it would be easier, harder, or make no difference in getting into a course or class if he/she had that characteristic. Schools will differ, we predict, with respect to which characteristics help one get the courses/classes one wants, and which hinder.

The question in the Instruction category tapping the teacher's response to various types of student behavior lists a large number of possible student learning behaviors in a classroom (e.g., asking questions, challenging a teacher's interpretation of subject matter). To each behavior respondents are asked to indicate how the teacher tends to respond. Response options range from "the teacher requires it" through "encourages" and "permits" to "the teacher does not permit it." Classrooms will differ, we predict, with respect to what kinds of behaviors teachers require or encourage, versus prohibit.

These examples represent the type of question in the questionnaire. For each aspect of each function there is a list of items which cover a broad range of possibilities. Then, for each of these sets, the response options represent a scale, often one which is substantive in itself (e.g., degrees of severity of punishment rather than the usual true/false or agree/disagree found in climate insturments).

Since these specific, discrete items are then combined into a scale value of the degree to which each school or classroom has each aspect of each function (e.g., a "severity of punishment score"), we have also included some more general true/false items covering the same content area (e.g., teachers are really hard on you around here if you do anything wrong). There should be agreement between the scale score derived from combining the low-level descriptive items and the general true/false items. The general items provide a validity check on the specific items.

The Uses of the Results

In analyzing the data, three types of comparisons are obvious:

(1) Comparisons between classrooms within a school, aggregated into important groupings, such as: courses, different types of subject

matter, different instructional approaches, classrooms with different evaluation strategies or between different levels of difficulty of courses. Here the intent would be to compare the patterns of the different classrooms (or other units of comparison) and to describe consistent differences in their carrying out of the functions.

(2) Comparisons between schools on the functions that are carried out at the school level, and if there are sufficient schools in a sample, comparisons between different types of schools (involving aggregating the school data). Types of schools can be defined by a number of criteria.

(3) Comparisons to explain differences in the way the functions are performed by using demographic characteristics of the students. Here various subgroups of the school, such as good students and poor students, minorities and nonminorities or male and female, would be compared in terms of the way they describe the performance of the functions in the school. The assumption is that their descriptions constitute an accurate perception and that, if there are major differences between major subgroups in the school, these represent actual differential treatment by the school or the classroom.

The importance of the instrument lies in the breadth of its description of schooling, and the breadth of the theoretical framework. The results should not only allow schools to look at what they do from a broad social perspective, but to provide sufficient concrete detail to allow them to alter their patterns of behavior if they choose.

For example, of growing concern to both educators and the public is the extent to which attention to Custody/Control dominates most schools' instructional missions and their orientations toward student socialization. In fact Custody/Control seems to have pervaded schools to such an extent that it also impinges on evaluation-certification. This "contamination" is apparent at both the classroom and school levels. In the classroom, for example, teachers control the evaluation process and commonly dispense grades not only on the basis of student performance and effort but on punctuality, attendance, "attitude," and deportment. At the school level formal certification and the awarding of diplomas depend as much on students' exposure to twelve full years of schooling as on the skills they acquire.

Attempts to deal with concerns such as these--that is, in this instance to make some changes so that Custody/Control does not have such a pervasive influence--are hampered by the lack of instrumentation to adequately diagnose the existing pattern of relationships among the functions in a school, or a conceptual framework for suggesting appropriate changes in one or more of the functions, or instrumentation to track the effects of a particular change on the pattern in a school.

This instrument will provide a major tool in planning and evaluating changes in schools. As the data from widespread use of the instrument become available, it should be possible to identify more and less stable patterns of manifestations among the functions and to predict the likely effects on other functions of a particular change in one. This would provide a major breakthrough in the planning of school change.

FOOTNOTES

1. This, of course, is far from [redacted]. For some time now various individuals have been pointing out the existence of a "hidden curriculum" in schools. For just one good example, see Robert Dreeben, On What Is Learned In Schools.

2. Just last summer the National Institute of Education funded a large, careful evaluation of the effects of the curriculum development efforts, under the direction of Dr. John Wirt of RAND, Washington D.C. This conclusion is a common one, given the present state of knowledge about the effects of the curriculum development efforts.

3. The evidence on this is substantial. One good source is the hearings on the renewal of the Elementary and Secondary Education Act. H.R. 69, U.S. House of Representatives, Committee on Education and Labor, February 8, 1973.

4. See particularly A Foundation Goes to School, the Ford Foundation, Office of Reports, 320 East 43rd Street, New York 10017, for a thorough review of their efforts and documentation of these conclusions.

5. A succinct summary of the early history of the alternative schools movement can be found in Allen Graubard's, Alternative Education: The Free School Movement in the United States." An ERIC paper. Stanford University: ERIC Clearinghouse on Media and Technology. September, 1972. A great deal of information is also available from the National Consortium for Options in Public Education, Bloomington, Indiana.

6. In some senses allowing students choice is merely the best we can do until we have more highly developed technologies for matching students with an appropriate context for learning. Choice is a means of bringing about appropriate matches. Conceptually, effecting a match is the crucial issue. For a general discussion of this issue, see David Hunt, Matching Models in Education, Toronto: Ontario Institute for the Study of Education. No. 10 1971.

7. For a thorough review of the literature which comes to the conclusion that this is needed, see Michael Fullan, "Overview of the Innovative Process and the User," Interchange, Vol. 3, Nos. 2-3, 1972. Also, the National Institute of Education has had for the first three years a priority on building local problem solving capability. A plan for this work, Building Capacity for Renewal and Reform, December, 1973, is available from the National Institute of Education.

8. A major project has recently been funded by the NIE to study existing long-term technical assistance efforts. This is being conducted by the Center for New Schools, 431 S. Dearborne Street, Chicago, Illinois.

9. This model is consistent with the entire approach to school change generally lumped under the category, "Organizational Development." See particularly the work of Richard Schmuck and Phillip Runkel of the Center for the Advanced Study of Educational Administration, University of Oregon. Another, even more elaborated model is under development by the Rural Education Program of the Northwest Regional Educational Laboratory, Portland, Oregon 97204.

10. The case study literature is massive and growing. One of the better known examples of the sort we have in mind is Summerhill.

11. See, for example, Bidwell, C.E. "The Second Transformation of American Secondary Education" International Journal of Comparative Sociology, Vol. 2, Sept. 1961. Pp. 144-166. Also, any of a number of writings by Durkheim.

12. Many books and articles might be cited here. See the collection of articles by Beatrice and Ronald Gross (Eds), Radical School Reform. New York: Simon and Schuster, 1969, for a good scurce.

13. Since in this case respondents are describing things in their environment, and our assumption is that the environment is relatively regular, probably only two or three are needed. We will be doing some validation studies of this question during the testing of the instrument.

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